

## **ABSTRACT**

A Collection Symbolic Job Expander enables people and programs to use convenient, symbolic job request expressions to perform complex operations on large numbers of collections with essentially no human effort involved. Collections are data-typed sets of computer files that can be manipulated as a set, rather than as individual files. In operation, a Collection Symbolic Job Expander receives a collection symbolic job request from a request originator, and performs a collection job expansion action on the request to produce a list of expanded job requests. Each expanded job request is comprised of a collection name, a user-defined computing platform name, and a processing dependency order ranking. Collection Symbolic Job Expanders improve human productivity by enabling people to perform operations on large sets of collections without being required to provide low-level processing details such as specific collection names, specific computing platform assignments, or processing dependency information. Collection Symbolic Job Expanders thereby enable the construction of advanced automated collection processing systems that can process large sets of collections in distributed, multiplatform, scalable ways that were not previously known to the art.